

Additional file 8: Excluded reports with reasons for exclusion

#	Study	Reason for exclusion
1	Antonello, N., & Grecchi, B. (2019). EFFECTIVENESS OF AN EXPIRATORY FLOW ACCELERATION DEVICE IN DYSPHAGIC PATIENTS WITH PARKINSON DISEASE. <i>Chest</i> , 156(4), A1784–A1785. https://doi.org/10.1016/j.chest.2019.08.1549	Congress abstract of Riboldazzi et al. 2020
2	Baijens, L., Speyer, R., & Pilz, W. (2011). The effect of surface electrical stimulation on swallowing in Parkinson's disease. <i>Dysphagia</i> , 26(4), 462. https://doi.org/10.1007/s00455-011-9345-1	Congress abstract on Baijens et al. 2012
3	Baijens, L. W. J., Speyer, R., Passos, V. L., Pilz, W., Van Der Kruis, J., Haarmans, S., & Desjardins-Rombouts, C. (2014). Surface electrical stimulation in dysphagic parkinson patients: A Randomized clinical trial. <i>Dysphagia</i> , 29(3), 404. https://doi.org/10.1007/s00455-014-9536-7	Comment on Baijens et al. 2013
4	Bird, M., Woodward, M., Gibson, E., Phyland, D., & Fonda, D. (1996). The effect of levodopa on swallowing in Parkinson's disease: Are there benefits in administration before meals? <i>AUSTRALIAN JOURNAL ON AGEING</i> , 15(1), 27–29. https://doi.org/10.1111/j.1741-6612.1996.tb00196.x	Wrong patient population (Parkinson's disease without oropharyngeal dysphagia)
5	Bushmann, M., Dobmeyer, S. M., Leeker, L., & Perlmutter, J. S. (1989). Swallowing abnormalities and their response to treatment in Parkinson's disease. <i>Neurology</i> , 39(10), 1309–1314. https://doi.org/10.1212/wnl.39.10.1309	Wrong study design (no control group)
6	Claus, I., Muhle, P., Suttrup, J., Schroeder, J. B., Suntrup-Krueger, S., Dziewas, R., & Warnecke, T. (2020). Expiratory muscle strength training (EMST) for treatment of pharyngeal dysphagia in Parkinson's disease: A randomized controlled trial. <i>Dysphagia</i> , 35(1), 143. https://doi.org/10.1007/s00455-019-10078-x	Congress abstract on Claus et al. 2021
7	De Graaf, L. (2007). Loss of saliva due to dysphagia: Patients with Parkinson's disease benefit from explanation and training. <i>Pharmaceutisch Weekblad</i> , 142(18), 29–31.	Wrong study design (no clinical intervention)
8	FENG Qing-ling, CHENG Yuan-yuan, LIU Pei-pei, ZHOU Xiao-na, WANG Yue, CHEN Rong-jie, YU Yang, & WU Jia-ling. (2019). Effects of vocalization training on drooling severity in Parkinson's disease. <i>Chinese Journal of Contemporary Neurology & Neurosurgery</i> , 19(11), 891–896.	Congress abstract on Feng et al. 2019

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- 9 Jost, W. H., Michel, O., Oehlwein, C., Slawek, J., Bogucki, A., Ochudlo, S., Banach, M., Pagan, F., Flatau-Baqu , B., Csik s, J., & Blitzer, A. (2018). Efficacy of incobotulinumtoxinA in subjects with sialorrhea, assessed using the modified radboud oral motor inventory for Parkinson's disease (mROMP). *Toxicon*, 156, S53–S54. <https://doi.org/10.1016/j.toxicon.2018.11.127> Congress abstract on Jost et al. 2019
- 10 Jost, W. H., Friedman, A., Michel, O., Oehlwein, C., Slawek, J., Bogucki, A., Ochudlo, S., Banach, M., Pagan, F., Flatau-Baqu , B., Dorsch, U., Csik s, J., & Blitzer, A. (2020). Long-term incobotulinumtoxinA treatment for chronic sialorrhea: Efficacy and safety over 64 weeks. *Parkinsonism & Related Disorders*, 70, 23–30. <https://doi.org/10.1016/j.parkreldis.2019.11.024> No swallowing related outcomes included
- 11 Kitashima, A., Umemoto, G., Tsuboi, Y., Higuchi, M., Baba, Y., & Kikuta, T. (2013). Effects of subthalamic nucleus deep brain stimulation on the swallowing function of patients with Parkinson's disease. *Parkinsonism & Related Disorders*, 19(4), 480–482. <https://doi.org/10.1016/j.parkreldis.2012.10.023> Wrong study design (no control group)
- 12 Kondo, E., Takeda, N., & Jinnouchi, O. (2017). Aural stimulation with capsaicin ointment improved the swallowing function in patients with dysphagia: A randomized, placebo-controlled, double-blind, comparative study. *Dysphagia*, 32(6), 817. <https://doi.org/10.1007/s00455-017-9805-3> Congress abstract on Kondo et al. 2017
- 13 Manor, Y., Freud, D., Mootanah, R., Gurevich, T., Giladi, N., & Jacob, C. T. (2010). Video assisted swallowing therapy improved quality of life measures more than traditional swallowing therapy in patients with Parkinson's disease. *Movement Disorders*, 25, S427. <https://doi.org/10.1002/mds.23162> Congress abstract on Manor et al. 2013
- 14 Marks, L., Turner, K., O'Sullivan, J., Deighton, B., & Lees, A. (2001). Drooling in Parkinson's disease: A novel speech and language therapy intervention. *International Journal of Language & Communication Disorders*, 36 Suppl, 282–287. <https://doi.org/10.3109/13682820109177898> Wrong patient population (Parkinson's disease without oropharyngeal dysphagia)
- 15 Merello, M., Starkstein, S., Nouzeilles, M. I., Kuzis, G., & Leiguarda, R. (2001). Bilateral pallidotomy for treatment of Parkinson's disease induced corticobulbar syndrome and psychic akinesia avoidable by globus pallidus lesion combined with contralateral stimulation. *Journal of Neurology, Neurosurgery, and Psychiatry*, 71(5), 611–614. <https://doi.org/10.1136/jnnp.71.5.611> No swallowing related outcomes included
- 16 Necati, E., Demir, N., Serel Arslan, S., Eker, A., Kaymakamzade, B., & Karaduman, A. A. (2020). Effect of kinesio taping on swallowing function in parkinson patients: A surface electromyographic swallowing study. *Turkish Journal of Physiotherapy and Rehabilitation*, 31(2), 202–209. Embase. <https://doi.org/10.21653/tjpr.540557> Wrong patient population (Parkinson's disease without oropharyngeal dysphagia)
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17	Nozaki, S., Matsui, T., Yoshikawa, H., Kaneto, T., Domen, K., & Daimon, T. (2013). Metronome therapy to treat dysphagia in patients with parkinson's disease. <i>Dysphagia</i> , 28(2), 298. https://doi.org/10.1007/s00455-013-9455-z	Full text not available (provided email address is inactive, no further contact address could be identified, full text could not be retrieved)
18	Nozaki, S., Sugishita, S., Imai, T., Oguro, D., Inokawa, M., Matsui, T., Umaki, Y., Kaneto, T., Domen, K., & Yoshikawa, H. (2011). Training for dysphagia with metronome improves swallowing function in parkinson disease. <i>Dysphagia</i> , 26(4), 443. https://doi.org/10.1007/s00455-011-9345-1	Full text not available (provided email address is inactive, no further contact address could be identified, full text could not be retrieved)
19	Oh, E., Sookyong, B., Soyoung, A., & Sungjoo, J. (2019). Developing silver food which is easy to swallow in patients with Parkinson's disease. <i>Journal of Parkinson's Disease</i> , 9(1), 180–181. Embase. https://doi.org/10.3233/JPD-199900	Congress abstract on Oh et al. 2021
20	Oh, E., Jee, S., Kim, B. K., Lee, J. S., Cho, K., & Ahn, S. (2021). A new swallowing supplement for dysphagia in patients with Parkinson's disease. <i>Neurological Sciences : Official Journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology</i> , 42(5), 1949–1958. https://doi.org/10.1007/s10072-020-04730-w	Wrong study design (no control group)
21	Ondo, W. G., Hunter, C., & Moore, W. (2004). A double-blind placebo-controlled trial of botulinum toxin B for sialorrhea in Parkinson's disease. <i>Neurology</i> , 62(1), 37–40. https://doi.org/10.1212/01.wnl.0000101713.81253.4c	No swallowing related outcomes included
22	Pflug, C., Nienstedt, J. C., Gulberti, A., Müller, F., Vettorazzi, E., Koseki, J.-C., Niessen, A., Flügel, T., Hidding, U., Buhmann, C., Weiss, D., Gerloff, C., Hamel, W., Moll, C. K. E., & Pötter-Nerger, M. (2020). Impact of simultaneous subthalamic and nigral stimulation on dysphagia in Parkinson's disease. <i>Annals of Clinical and Translational Neurology</i> , 7(5), 628–638. https://doi.org/10.1002/acn3.51027	Wrong patient population (Parkinson's disease without oropharyngeal dysphagia)
23	Restivo, D. A., Palmeri, A., & Marchese-Ragona, R. (2002). Botulinum toxin for cricopharyngeal dysfunction in Parkinson's disease. <i>The New England Journal of Medicine</i> , 346(15), 1174–1175. https://doi.org/10.1056/NEJM200204113461517	Wrong study design (no clinical intervention for oropharyngeal dysphagia)
24	Riboldazzi, G., Spinazza, G., Beccarelli, L., Prato, P., Grecchi, B., D'Abrosca, F., & Nicolini, A. (2020). Effectiveness of expiratory flow acceleration in patients with Parkinson's disease and swallowing deficiency: A preliminary study. <i>Clinical Neurology and Neurosurgery</i> , 199, 106249. https://doi.org/10.1016/j.clineuro.2020.106249	No swallowing related outcomes included

25	Saleem, A., Sapienza, C., Rosenbek, J., Musson, N., & Okun, M. (2005). The effects of expiratory muscle strength training program on pharyngeal swallowing in patients with idiopathic Parkinson's disease. <i>MOVEMENT DISORDERS</i> , 20, S73–S74.	Congress abstract, full text not available; most likely on Troche et al. 2010
26	Saleem, A., Sapienza, C., Rosenbek, J., Musson, N., & Okun, M. (2005). The effects of expiratory muscle strength training on pharyngeal swallowing in patients with idiopathic Parkinson's disease. <i>NEUROLOGY</i> , 64(6), A397–A397.	Congress abstract, full text not available; most likely on Troche et al. 2010
27	Sapienza, C. M., Troche, M., Silverman, E. P., Rosenbek, J., & Musson, N. (2012). Strength training outcomes for airway protection in PD. <i>Movement Disorders</i> , 27, S139. https://doi.org/10.1002/mds.25051	Congress abstract, full text not available; most likely on Troche et al. 2010
28	Sapienza, C., Troche, M., Silverman, E., Rosenbek, J., Musson, N., & Okun, M. (2011). Strength training outcomes for airway protection in PD. <i>Neurodegenerative Diseases</i> , 8. https://doi.org/10.1159/000327701	Congress abstract, full text not available; most likely on Troche et al. 2010
29	Sordoni, E., Andrenelli, E., Di Biagio, L., Millevolte, M., Ceravolo, M. G., & Capecci, M. (2014). Comparative efficacy and safety of botulinum toxin type A and B in treating Parkinson's disease-related sialorrhea: A pre-test post-test study. <i>Annals of Physical and Rehabilitation Medicine</i> , 57, e363–e364. https://doi.org/10.1016/j.rehab.2014.03.1215	Congress abstract, full text not available, contacted first and second author, awaiting response
30	Sundstedt, S., Nordh, E., Linder, J., Hedström, J., Finizia, C., & Olofsson, K. (2017). Swallowing Quality of Life After Zona Incerta Deep Brain Stimulation. <i>The Annals of Otology, Rhinology, and Laryngology</i> , 126(2), 110–116. https://doi.org/10.1177/0003489416675874	Wrong patient population (Parkinson's disease without oropharyngeal dysphagia)
31	Tawadros, P., Cordato, D., Cathers, I., & Burne, J. (2012). An Electromyographic Study of Parkinsonian Swallowing and Its Response to Levodopa. <i>MOVEMENT DISORDERS</i> , 27(14), 1811–1815. https://doi.org/10.1002/mds.25262	Wrong study design (no control group)
32	Troche, M., Okun, M., Rosenbek, J., Musson, N., & Sapienza, C. (2009). Swallow outcomes following intervention with expiratory muscle strength training (EMST) in Parkinson's disease: Results of a randomized clinical trial. <i>Dysphagia</i> , 24(4), 455–456. https://doi.org/10.1007/s00455-009-9233-0	Congress abstract on Troche et al. 2010
33	Troche, M., Rosenbek, J., Okun, M., & Sapienza, C. (2011). Swallowing and breathing related outcomes following detraining in EMST. <i>Dysphagia</i> , 26(4), 443–444. Embase. https://doi.org/10.1007/s00455-011-9345-1	Congress abstract on Troche et al. 2010
34	Wu, M.-X., Wang, L.-G., Li, H.-P., & Zeng, X. (2021). [Acupuncture adjuvant treatment for dysphagia in patients with Parkinson's disease: A randomized controlled trial]. <i>Zhongguo zhen jiu = Chinese acupuncture & moxibustion</i> , 41(5), 485–488. https://doi.org/10.13703/j.0255-2930.20200724-0002	Full text not available (no contact address could be identified; full text could not be retrieved)

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- 35 Xie, T., Bloom, L., Padmanaban, M., Bertacchi, B., Kang, W., Dachman, A., MacCracken, E., Zadikoff, C., Markopoulou, K., Warnke, P., & Kang, U. (2018). Long-term effect of low frequency stimulation of STN on dysphagia, freezing of gait and other motor symptoms in PD. *Movement Disorders*, 33, S263. Congress abstract on Xie et al. 2018
- 36 Xie, T., Bloom, L., Padmanaban, M., Takahashi, K., Kang, W., Dachman, A., MacCracken, E., & Warnke, P. (2021). Impact of oral textures on aspiration and changes in swallow dynamics in patients with PD with DBS. *Journal of Neurology, Neurosurgery & Psychiatry*, 92(4), 447–449. <https://doi.org/10.1136/jnnp-2020-324579> Same participants and study as in Xie et al. 2018, different outcomes, but not a full report of the study, "letter to the editor"
- 37 陈艳红, 孙涛, & 陈敏. (2017). 内德尔松手法联合康复训练治疗帕金森病病人吞咽障碍的疗效观察. *Chinese Nursing Research*, 31(7), 864–866. ccm. <https://doi.org/10.3969/j.issn.1009-6493.2017.07.032> Full text not available (no contact address could be identified; full text could not be retrieved)
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